



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,898	01/25/2002	Satoshi Shinada	Q67951	8316

7590 01/24/2003

SUGHRUE MION, PLLC  
2100 Pennsylvania Avenue, NW  
Washington, DC 20037-3213

EXAMINER
----------

NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
----------	--------------

2863

DATE MAILED: 01/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/054,898

Applicant(s)

SHINADA ET AL.

Examiner

Michael P Nghiem

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on November 5&12, and December 23, 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 50-52 and 58-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 50-52 and 60 is/are allowed.
- 6) ☒ Claim(s) 58,59,61 and 63 is/are rejected.
- 7) ☒ Claim(s) 62 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/437,246.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The Amendments filed November 5, 2002 and November 12, 2002 have been acknowledged.

#### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 23, 2002 has been entered.

#### ***Claim Objections***

2. Claim 59 is objected to because of the following informalities:

- "or" (last line) should be -- of --.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 58, 59, 62, and 63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims lack antecedent basis, "said packing member".

The remaining claims are also rejected under 35 U.S.C. 112, second paragraph, for being dependent upon a rejected base claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 59 and 61 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagasaki et al. (US 6,036,305).

Nagasaki et al. discloses all the claimed features of the invention including:

- an ink supply system (Figs. 3, 5, 6) for a printing apparatus (Fig. 7) providing ink to a printing head (1) through a tapered ink supply needle (2), said ink supply system capable of providing ink contained in an ink chamber (interior of 11 including 12, 13) to the print head through the ink supply needle (Fig. 3), comprising:

- an ink channel (outlet of 11) for providing ink from said ink chamber to the print head of the printing apparatus (Fig. 6);

- a first member (18) provided at said ink channel, forming a part of said ink channel for allowing a flow of ink (Fig. 6), said first member sealing the ink supply needle of the ink printing apparatus by fitting therewith (Fig. 5);

- a second member (17) contained in said ink channel elastically abutting against said first member in a direction which is the same as a direction of the sealing by said first member with said second member (Figs. 5, 6), said second member selectively

opening and closing said ink channel in conjunction with the ink supply needle (Figs. 5, 6);

- said second member comprises a guide body (left wall of 11) operably allowing said second member to slide substantially vertically with respect to said packing member (19), said guide body operably suppressing a horizontal deviation or said second member (18 cannot not deviate horizontally to the left);

- said ink channel extending substantially straight to an interior of said ink chamber from said ink supply port (outlet of 11 extends straight to 13).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 58 is rejected under 35 U.S.C. 102(b) as being anticipated by Mitchell et al. (US 4,162,501).

Mitchell et al. discloses an ink supply system (Fig. 1) for a printing apparatus providing ink to a printing head through a tapered ink supply needle (39, column 5, lines 4-7), said ink supply system capable of providing ink contained in an ink chamber to the print head through the ink supply needle, comprising:

Art Unit: 2863

- an ink channel (ink path from chamber to print head, Fig. 1) for providing ink from said ink chamber to the print head of the printing apparatus (Fig. 1);
- a first member (37) provided at said ink channel, forming a part of said ink channel for allowing a flow of ink (Fig. 1), said first member sealing the ink supply needle of the ink printing apparatus by fitting therewith (Fig. 1);
- a second member (17) contained in said ink channel elastically abutting against said first member in a direction which is the same as a direction of the sealing by said first member with said second member (17 abuts 37), said second member selectively opening and closing said ink channel in conjunction with the ink supply needle (Figs. 1, 2); wherein said second member comprises a surface, facing said packing member (37), provided with a notch (61, Fig. 6), said notch having an angle (Fig. 6) defined in conjunction with the tapered angle of the ink supply needle (Fig. 8);
- the angle of said notch is smaller than the tapered angle of the ink supply needle (angle of 61, Fig. 6, compared to tapered shape of needle, Fig. 8).

***Allowable Subject Matter***

6. Claim 62 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 50-52 and 60 is allowed.

***Reasons For Allowance***

8. The combination as claimed wherein said protruding member contacts the ink supply needle of the printing apparatus (claim 50) or said second member comprises a guide rod extending along a direction to the ink chamber, and a guide unit fitting with said second member for allowing said second member to slide along the direction of the sealing of said first member with said second member (claim 60) or the angle of said notch is the same as the tapered angle of the ink supply needle.

***Response to Arguments***

9. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nagasaki et al. (JP 08-183185) is a Japanese equivalent of Nagasaki et al. (US 6,036,305).



Art Unit: 2863

***Contact Information***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hilten can be reached at (703) 308-0719. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**MICHAEL NGHIEM**  
**PRIMARY EXAMINER**

Michael Nghiem

January 23, 2003